

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed April 30, 2004. Claims 1-39 were pending in the Application. In the Office Action, Claims 1-3, 7, 9-11, 15, 17-26 and 28 were rejected, Claims 4-6, 8, 12-14, 16 and 27 were objected to, and Claims 29-39 are considered allowable. In order to expedite and advance the prosecution of the Application, Applicants amend Claims 10 and 17. Thus, Claims 1-39 remain pending in the Application.

In the Office Action, the following actions were taken or matters were raised:

SECTION 112 REJECTIONS

The Examiner rejected Claims 10 and 17 under 35 U.S.C § 112 as having insufficient antecedent basis for the term “the plurality of user terminals.” Applicants have amended Claims 10 and 17 to replace the term “user terminals” with “display devices.” Applicants respectfully request that this rejection now be withdrawn.

SECTION 102 REJECTIONS

The Examiner rejected claims 1, 2, 9, 10, 17-23 and 28 under 35 U.S.C. § 102(a) as being anticipated by publication “WireGL: A Scalable Graphics System for Clusters” by Greg Humphreys et al. (hereinafter “*Humphreys*”). Applicants respectfully traverse these rejections.

Of Claims 1, 2, 9, 10, 17-23 and 28, Claims 1, 9 and 22 are independent. Applicants respectfully submit that *Humphreys* does not disclose or even suggest each and every limitation of independent Claims 1, 9 and 22. For example, *Humphreys* does not disclose or even suggest “a switching fabric operable to dynamically couple select one or more of the plurality of visualization resource units to select one or more of the plurality of compute resource units” as recited by Claim 1, a “switching fabric operable to dynamically selectively couple outputs of the plurality of first compute resource units to inputs of the plurality of second compute resource units” as recited by Claim 9, or “means for dynamically selectively coupling one or more outputs of the first resource means to one or more inputs of the second resource means” as recited by Claim 22.

The Examiner refers to the high speed cluster interconnect of figure 2 of *Humphreys* as being equivalent to the “switching fabric” and “means for dynamically selectively coupling” as recited by respective Claims 1, 9 and 22 (Office Action, page 2, section 3). Applicants respectfully disagree. *Humphreys* is directed toward a system for scalable interactive rendering on a cluster of workstations by apparently virtualizing multiple graphics accelerators into a sort-first parallel renderer with a parallel interface (*Humphreys*, page 129, column 1, in the Abstract, lines 1-4). *Humphreys* appears to disclose a plurality of clients or applications coupled to a plurality of graphics servers or pipeservers via a high speed cluster interconnect (*Humphreys*, figure 2). However, *Humphreys* states that “[e]ach pipeserver has its own graphics accelerator and a high-speed network connecting it to all clients” (*Humphreys*, page 131, second column, first paragraph of section 3)(emphasis added). *Humphreys* also states that a “client library keeps a copy of each server’s graphics state” and each client “perform[s] a sort-first distribution of geometry and state to all pipeservers” (*Humphreys*, page 132, last paragraph of column 1 under section 3.1 to first paragraph of column 2, and the third full paragraph under column 2 of page 132)(emphasis added), and that the clients of *Humphreys* submit OpenGL commands simultaneously to the connected pipeservers (*Humphreys*, page 131, column 2, first paragraph of section 3). Thus, *Humphreys* does not disclose or even suggest dynamically coupling select visualization resource units to select compute resource units or dynamically selectively coupling outputs of first compute resource units to inputs of second compute resource units. To the contrary, *Humphreys* apparently discloses that the clients of *Humphreys* are coupled to, and submit commands to, all pipeservers of *Humphreys*. Thus, for at least this reason, *Humphreys* does not anticipate Claims 1, 9 or 22.

Claims 2, 10, 17-21, 23 and 28 that depend respectively from independent Claims 1, 9 and 22 are also not anticipated by *Humphreys* at least because they incorporate the limitations of respective Claims 1, 9 and 22 and, also, they add additional elements that further distinguish *Humphreys*. Therefore, Applicant respectfully requests that the rejection of Claims 2, 10, 17-21, 23 and 28 be withdrawn.

SECTION 103 REJECTIONS

The Examiner rejected Claims 3, 11 and 26 under 35 U.S.C. § 103(a) as being unpatentable over *Humphreys*. The Examiner also rejected Claims 7, 15, 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over *Humphreys* in view of U.S. Patent No. 5,408,606 issued to Eckart. Applicants respectfully traverse these rejections.

Claims 3, 7, 11, 15 and 24-26 depend respectively from independent Claims 1, 9 and 22. As discussed above, independent Claims 1, 9 and 22 are patentable over the cited reference. Therefore, Claims 3, 7, 11, 15 and 24-26 that depend respectively therefrom are also patentable. Therefore, Applicants respectfully request that the rejection of Claims 3, 7, 11, 15 and 24-26 be withdrawn.

CLAIM OBJECTIONS

The Examiner objected to Claims 4-6, 8, 12-14, 16 and 27 as being dependent upon a rejected base claim. Applicants thank the Examiner for indicating that Claims 4-6, 8, 12-14, 16 and 27 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 4-6 and 8 depend from independent Claim 1, Claims 12-14 and 16 depend from independent Claim 9, and Claim 27 depends from independent Claim 22. As discussed above, independent Claims 1, 9 and 22 are patentable over the cited reference. Therefore, Claims 4-6, 8, 12-14, 16 and 27 that respectively depend therefrom are also patentable. Thus, Applicants respectfully request that the objection to Claims 4-6, 8, 12-14, 16 and 27 be withdrawn.

ALLOWED CLAIMS

Applicants thank the Examiner for indicating that Claims 29-39 are allowed. Claims 29-39 remain unchanged. Therefore, Applicants respectfully submit that Claims 29-39 remain allowable.



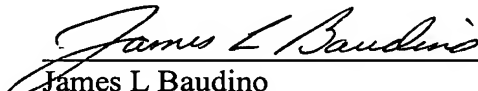
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and full allowance of all pending claims.

No fee is believed due with this response. If, however, Applicants have overlooked the need for any fee, the Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this response to Deposit Account No. 08-2025 of Hewlett-Packard Company.

Respectfully submitted,

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